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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/540,011

06/22/2005

Herbert Baltes

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ROYLANCE, ABRAMS, BERDO & GOODMAN, L.L.P.
1300 19TH STREET, N.W.
SUITE 600
WASHINGTON,, DC 20036

EXAMINER

WALTERS, RYAN J

ART UNIT

PAPER NUMBER

4177

MAIL DATE

DELIVERY MODE

04/03/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/540,011	Applicant(s) BALTES ET AL.	
	Examiner RYAN J. WALTERS	Art Unit 4177	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 6/22/2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 6/22/2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>6/22/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: **36 (in Fig. 2)**. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. **The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided.** The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

3. The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The abstract of the disclosure is objected to because "means" is used in the abstract. Correction is required. See MPEP § 608.01(b).

Claim Objections

4. **Claim 10** objected to because of the following informalities:

Free longitudinal edge is labeled as reference number 38 but should be labeled as 32.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims recite a method for the production of a piston-type accumulator but do not include steps to produce the piston type accumulator. It appears that the claims merely recite the structure.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Bizak (U.S. Patent No. 2,734,531).

In regards to Claim 1, Bizak discloses a piston type accumulator having an accumulator housing, (“cylindrical casing”, Col. 4, lines 51-52, Fig. 1), and a freely slidable separating piston 48 (Fig. 1) which is displaceable in the longitudinal direction and which separates two working chambers. (Col. 1, line 53-55) Bizak further discloses the accumulator housing being sealed on each of the end sides by a cover component 15, 28 (Fig. 1) which are fastened to the accumulator housing by way of the free longitudinal edge 10 (Fig. 1) of the accumulator housing (See Col. 2, lines 31, Col. 2, line 43-45), by way of the threads 34 on the longitudinal edge 10 (Fig. 1), which for this purpose undergoes a positioning movement onto the cover component 15, 28.

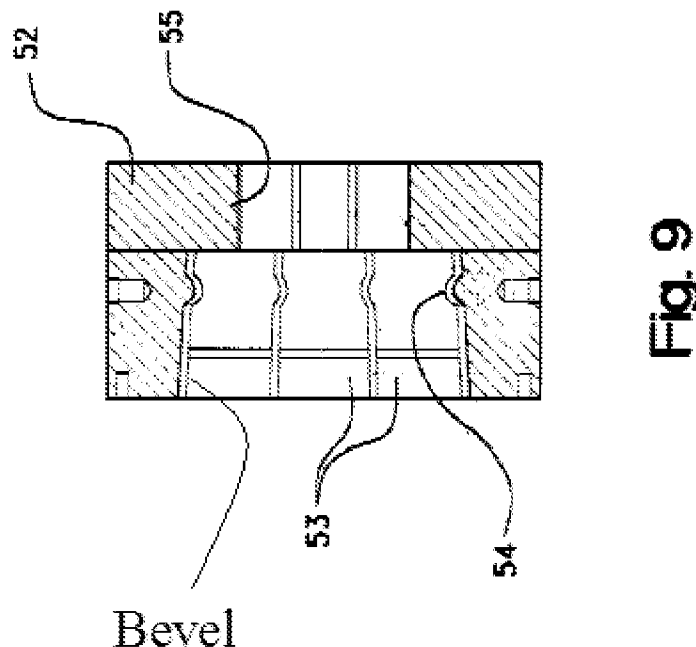
9. Claim 1 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by Rajabi (U.S. Patent No. 6,460,571).

In regards to Claim 1, Rajabi discloses a piston-type accumulator having an accumulator housing 12 (Fig. 2) and a separating piston 26 (Fig. 2) displaceable in the longitudinal direction in the accumulator housing 12 which separates two working chambers 27, 28 (Fig. 2) from each other inside the accumulator housing 12, and which

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accumulator housing is sealed on each of the end sides by a cover component 14, 16 (Fig. 2), characterized in that on one side of the cover component (14, 16) such cover component is fastened by way of the free longitudinal edge of the accumulator housing 12, which for this purpose undergoes a positioning movement onto the cover component 14, 16 (via the die 52 which presses the longitudinal edge against the cover, Fig. 7, Col.4, lines 34-38).

In regards to Claim 3, Rajabi discloses a shaping tool 52 (Fig. 7) provided for the positioning movement of the longitudinal edge of the accumulator housing 12, which shaping tool 52 which positions the longitudinal edge provided with least one positioning bevel (since bevel is defined as “A finished edge with an angle serving as a transition piece from one surface to another surface”; See picture below taken from Fig. 9) on the cover component 16 in such a way that this cover component 16 is secured in the accumulator housing 12 as a kind of clamping seat.



Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 2, 6, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rajabi in view of Audureau (EP 1,128,073).

In regards to Claim 2, Rajabi discloses all of the recited structure with the exception of one side of a cover component inserted into the accumulator housing so as to come to rest against a stop. However, Audureau teaches a cover component 2 (Fig. 1) inserted into the accumulator housing and coming to rest against a stop 25 (Fig. 1). The cover component 2 is retained in its end position by the clamping force of the positioned free

longitudinal edge 24 (Fig. 1). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to combine the use of a stop as taught by Audureau with the invention disclosed by Rajabi for the purpose of ensuring that the cover component is placed into the desired location in relation to the accumulator housing.

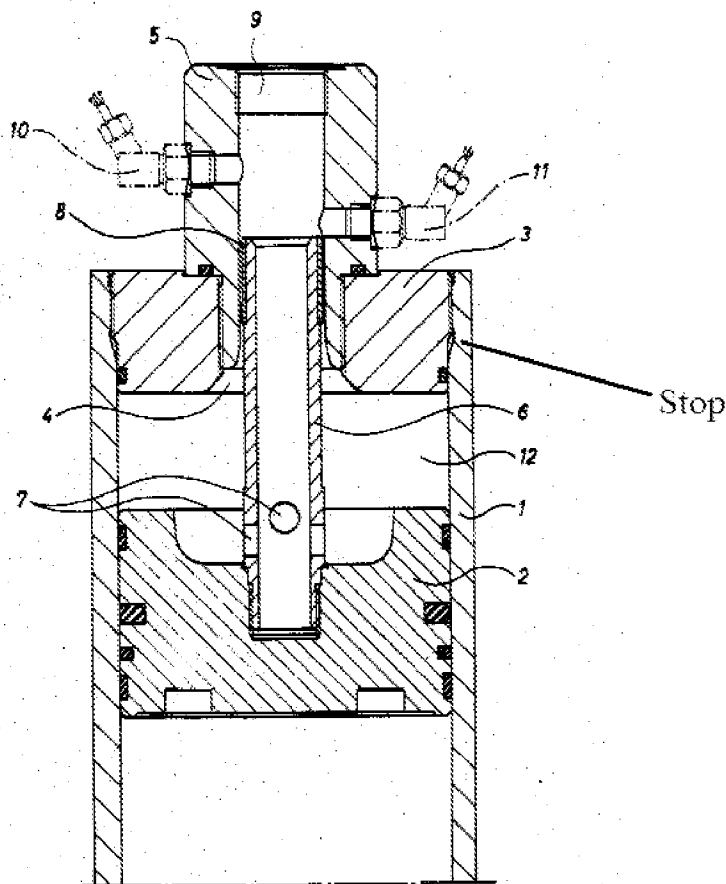
In regards to Claim 6, Rajabi discloses all of the recited structure with the exception of the opposite side of a cover component having a contact surface in the form of a securing bevel against which the longitudinal edge rests in the secured state. Audureau teaches a cover component 2 (Fig. 1) where on the opposite side there is a securing bevel 26 (Fig. 1) against which the longitudinal edge 24 (Fig. 1) rests in the secured state. The cover component 2 closes off the accumulator housing from the exterior. Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to combine the use of a securing bevel as taught by Audureau with the invention disclosed by Rajabi for the purpose of ensuring that the cover component will be held securely in the desired location.

In regards to Claim 10, Rajabi discloses all of the recited structure with the exception of having the height selected for the cover component being at least twice as great as the free longitudinal edge of the accumulator housing introduced for the purpose of clamping the cover component. Audureau teaches in Figure 1 that the height of the cover component 2 is clearly more than twice as great as the height of that of the free longitudinal edge 24 introduced for the purpose of clamping the cover component. Therefore, it would have been obvious to one with ordinary skill in the art at the time the

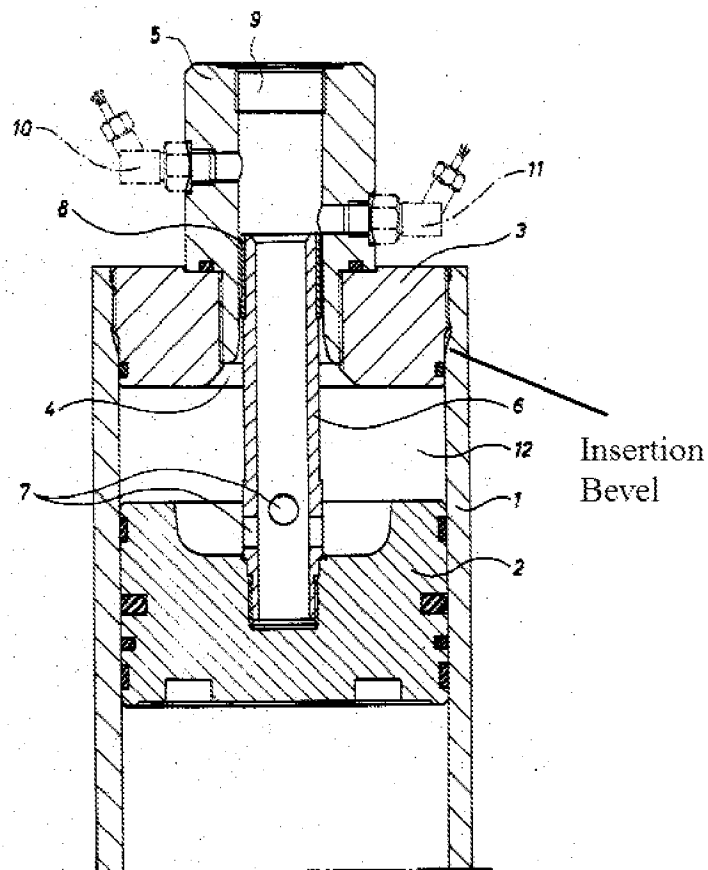
invention was made to modify Rajabi's invention to make the cover component longer than the free longitudinal edge that is clamping the cover component, as taught by Audureau, for the purpose of ensuring that the cover component would be held securely in the desired location.

12. Claims 4, 5, 8, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rajabi in view of Peter (US 4,644,976).

In regards to Claim 4, Rajabi discloses all of the recited structure with the exception of the wall thickness of the longitudinal edge reduced in relation to that of the remainder of the accumulator housing and wherein the point of transition between the different wall thickness. Peter teaches the wall thickness of the longitudinal edge, at the end closest to the cover 3 (See sole Figure), reduced in relation to the thickness of the remainder of the accumulator housing 1 (See sole Figure). At the point of transition between the different wall thicknesses, there exists a bevel which forms a stop (See picture below; taken from sole Figure) for the cover component 3 inside the accumulator housing 1. Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to reduce the wall thickness of the longitudinal edge of Rajabi's invention in order to create a stop for the cover component, as taught by Peter, for the purpose of reducing the amount of material needed for manufacture thereby saving money and to ensure that the cover component is positioned in the desired location relative to the longitudinal edge.



In regards to Claim 5, Rajabi discloses all of the recited structure with the exception of an insertion bevel on the longitudinal edge. Peter teaches an insertion bevel (See picture below; taken from sole Figure) on the longitudinal edge 1 (See sole Figure) which is facing the respective cover component 3 (See sole Figure) and toward the exterior. Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to include an insertion bevel as taught by Peter with the invention disclosed by Rajabi for the purpose of guiding the cover component into the accumulator housing in order to ensure proper installation of the cover component.



In regards to Claim 8, Rajabi discloses all of the recited structure with the exception of a cover component being introduced into the accumulator housing up to a stop by means of a feed bevel by means of a positioning tool which encloses the free longitudinal edge of the accumulator housing. Rajabi discloses a positioning tool 48 (Fig. 2) which encloses the longitudinal edge of the accumulator housing (See Col. 4, lines 4-8). Peter teaches a cover component 5 (See sole Figure) introduced into the accumulator housing up to the stop by means of the feed bevel (previously discussed) located at the transition point between the different wall thicknesses (See the sole figure). Therefore, it would be obvious to one with ordinary skill in the art at the time the

invention was made to modify Rajabi's invention to include the stop and feed bevel, as taught by Peter, for the purpose of ensuring proper installation of the cover component as well as ensuring that the cover component will be held securely in the desired location.

In regards to Claim 9, Rajabi discloses all of the recited structure with the exception of the longitudinal edge being provided with, on the internal circumference side, an insertion bevel widening toward the exterior of the cover component. Peter teaches an insertion bevel (previously discussed), located at the transition point between the different wall thicknesses of the longitudinal edge 1 (See sole Figure), which widens toward the exterior of the cover component 3 (See sole Figure). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify Rajabi's invention to include this insertion bevel on the longitudinal edge, as taught by Peter, for the purpose of ensuring proper installation of the cover component.

13. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rajabi, as applied to Claim 3 above, in view of Ando (US 5,115,663). Rajabi discloses all of the recited structure with the exception of having two shaping tools in a joint positioning movement execute the securing process for the respective cover component on opposite sides of the accumulator housing by acting on the respective free longitudinal edge of the accumulator housing. Rajabi discloses a shaping tool 52 (Fig. 7) that executes the securing process for the cover component 14, 16 (Fig. 7) by acting on the free longitudinal edge of the accumulator housing 12 (Fig. 7). Ando teaches a method of

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forming a metallic article using two shaping tools 36a, 36b (Fig. 1), having one shaping tool on each end of said article. Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify Rajabi's invention to include the use of two shaping tools, as taught by Ando, for the purpose of securing both cover components to the accumulator housing simultaneously in order to save time.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RYAN J. WALTERS whose telephone number is (571)270-5429. The examiner can normally be reached on Monday-Thursday, 8am-5pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Quang Thanh can be reached on 571-272-4982. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Quang D. Thanh/
Supervisory Patent Examiner,
Art Unit 4177

/R. J. W./
Examiner, Art Unit 4177